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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/084,965

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Nelson F. Martinez

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06/14/2004

MOTOROLA INC
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EXAMINER

OSORIO, RICARDO

ART UNIT

PAPER NUMBER

2673

9

DATE MAILED: 06/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/084,965

Applicant(s)

MARTINEZ, NELSON F.

Examiner

RICARDO L OSORIO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,14-18,21,22 and 24-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 10, 14-18, 21, 22 and 24-26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10-13, 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehtiniemi et al (6,466,299) in view of Lin et al (6,535,216).

Regarding claims 10 and 21, Lehtiniemi teaches of a wireless communications handset (Fig. 1, reference character MS) comprising electronic hardware (it is inherent that a wireless communication handset, such as a mobile station comprises electronic hardware), a housing disposed about at least a portion of the electrical hardware, at least a portion of the housing comprising a variable user input responsive variable appearance portion (Fig. 1, reference character A1, and col. 3, lines 41-50), whereby the variable input responsive variable appearance portion of the housing changes appearance in response to a variable user input (col. 1, line 66-col. 2, line 14 and col. 3, lines 61-65). However, Lehtiniemi fails to teach of a control circuit having a user variable output that coupled to and that makes change appearance of the variable input responsive variable appearance portion.

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Lin teaches of a control circuit having a user variable output that coupled to and that makes change appearance of the variable input responsive variable appearance (col. 8, lines 24-67 and col. 10, lines 42-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the control circuit, as taught by Lin, in the device of Lehtiniemi so that the color or shade of the electrochromic medium can be progressively changed by a user between a clear and a maximum desired color or shade (col. 8, lines 65-67).

Regarding claim 11, Lehtiniemi teaches that the portion of the housing is a photo-chromic material that changes color in response to variations of sunlight (col. 1, lines 25-30).

Regarding claims 12 and 23, Lehtiniemi teaches that the portion of the housing is a thermo-chromic material that changes appearance in response to variations in temperature (col. 3, lines 41-50).

Regarding claim 13, Lehtiniemi teaches that the portion of the housing is a gonio-chromic material that changes appearance in response to variations in angles of reflected light (col. 1, lines 18-21).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehtiniemi et al (6,466,299) in view of Lin et al (6,535,216) as applied to claims 10-13, 21 and 23 above, and further in view of Brown (US 2002/0075135).

Regarding claim 14, Lehtiniemi, as anticipated by Lin, fails to teach that the portion of the housing is a light emitting polymer material.

Brown teaches a housing having a portion that is a light emitting polymer material (page 1, col. 2, lines 21-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the light emitting polymer material, as taught by Brown, in the device of Lehtiniemi and Lin thus the number of components in the device may be reduced without loss of versatility or functionality (page 1, col. 2, lines 23-25).

2. Claims 15-16, 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehtiniemi in view of Lin and Brown, as applied to claim 14 above, and further in view of Bailey (5,849,046).

Regarding claims 15-16, 22, and 24, the device of Lehtiniemi, as anticipated by Lin and Brown, fails to teach of the variable input responsive variable appearance portion of the housing being an electro-chromic polymer, a color control circuit having a variable voltage output coupled across the electro-chromic material.

Bailey teaches of the variable input responsive variable appearance portion of the housing being an electro-chromic polymer (col. 2, lines 26-43 and col. 4, lines 12-16), a color

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control circuit having a variable voltage output coupled across the electro-chromic material (col. 7, line 49-col. 8, line 9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the electrochromic material, as taught by Bailey, in the combined device of Lehtiniemi, Lin, and Brown because, since the device does not rely on heat, the thermal mass of the battery will not affect the operation of the device (col. 8, line 61-63).

3. Claims 17-18, 25, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lehtiniemi in view of Lin, Brown, and Bailey as applied to claims 15-16 and 22 above, and further in view of IDS article ("Conducting Polymers and Electrochromic Devices", hereafter referred to as the IDS web article).

Regarding claims 17-18, 25 and 26, Lehtiniemi, as anticipated by Lin, Brown and Bailey, fails to teach of the electrochromic material including an anodically coloring polymer and a cathodically coloring layer separated by a solid-state gel electrolyte layer, the anodically and cathodically coloring layers disposed between first and second transparent conducting layers, the control circuit having a first output coupled to the first transparent conducting layer, the control circuit having a second output coupled to the second transparent conducting layer by a variable resistance element, and the first and second transparent conducting layers disposed between the first and second insulating layers. The IDS web article teaches of the electrochromic material including an anodically coloring polymer and a cathodically coloring layer (see Fig 4, Electrochromic Polymers) separated by a solid-state gel electrolyte layer (see Fig. 4, Gel Electrolyte), the anodically

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and cathodically coloring layers disposed between first and second transparent conducting layers (Fig. 4, ITO Layers), the control circuit having a first output coupled to the first transparent conducting layer, the control circuit having a second output coupled to the second transparent conducting layer by a variable resistance element (see Fig. 4, the power supply is connected to both the first and second transparent conductors-ITO layers. The use of a variable resistance to control the color is inherent since for the voltage to change, the resistance also needs to change), and the first and second transparent conducting layers disposed between the first and second insulating layers (see Fig. 4, Insulating Substrates).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the electro-chromic layer order, as taught by the IDS web article, in the combined device of Lehtiniemi, Lin, Brown and Bailey because these combination obtains high contrast, rapid switching electrochromic devices of various colors (see first paragraph under Fig. 4).

Response to Arguments

4. Applicant's arguments filed 4/16/2004 have been fully considered but they are not persuasive.

Applicant argues that Lehtiniemi and Lin are not analogous art, that this combination would not be operable.

Examiner disagrees because both Lehtiniemi and Lin disclose a device that changes color as a result of an outside force or condition. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as

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a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

Regarding operability, examiner relies on Lin's control circuit having a user variable output. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references.

Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Also, applicant argues that there is no suggestion to combine Lin with Lehtiniemi.

Examiner disagrees because Lin teaches of a control circuit having a user variable output that is coupled to and that makes change appearance of the variable input responsive variable appearance (col. 8, lines 24-67 and col. 10, lines 42-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the control circuit, as taught by Lin, in the device of Lehtiniemi so that the color or shade of the electrochromic medium can be progressively changed by a user between a clear and a maximum desired color or shade (col. 8, lines 65-67).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is (703) 305-2248. The examiner can normally be reached on Mon-Thu from 7:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Ricardo L. Osorio
Examiner
Art Unit: 2673

RLO
June 8, 2004


BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600